

# Claims

[c1] What is claimed is:

1.A method for detecting an unbalanced disc with a compact disc (CD) drive, the CD drive comprising a pick-up head for reading data stored on an optical disc, and a motor for rotating the optical disc, the method comprising the following steps:

(a)adjusting a rotary speed of the motor so that a vibration frequency of the CD drive is approximately a resonance frequency of a coil of the pick-up head;

(b)when the vibration frequency of the CD drive is approximately the resonance frequency of the coil of the pick-up head, detecting if a voltage value of a central error (CE) signal is larger than a threshold voltage; and

(c)determining if the optical disc is an unbalanced disc according to a result of step (b).

[c2] 2.The method of claim 1 wherein the method further comprises converting an optical signal, which is reflected from the optical disc and received by the pick-up head, into the voltage value.

[c3] 3.The method of claim 2 wherein the CE signal is generated according to the optical signal that is reflected from

the optical disc and received by the pick-up head.

[c4] 4.The method of claim 1 wherein when the voltage value of the CE signal is larger than the threshold voltage, the optical disc is determined as an unbalanced disc.

[c5] 5.A device for implementing the method of claim 1.